

SABINA STASZCZYK
ALEKSANDRA TOKARZ
Jagiellonian University
Institute of Psychology

THE RELATIONSHIP BETWEEN INDICATORS OF WORKAHOLISM AND BURNOUT IN SPECIALISTS AND MANAGERS

The aim of the study was to: (1) confirm the expected positive relationships between workaholism and burnout syndrome; (2) explore the relationships between the indicators of workaholism, burnout, and seniority; (3) build and verify empirically the structural model in an attempt to structure the relationships between the studied variables. The verification of the hypothesis was conducted among white-collar workers of a large company operating in the Polish market. Of the indicators of workaholism, only work enjoyment and work–life imbalance – doing showed significant relationships with both components of burnout. The strongest negative predictor of burnout was work enjoyment. On the basis of correlation and regression analyses, the structural model explaining the variance in burnout syndrome was proposed and tested. Indicators of workaholism and seniority were the explanatory variables.

Keywords: workaholism, burnout syndrome, work–life imbalance, use of time, seniority.

“In order to burn out, one has first to be ‘on fire’” wrote Pines (1993, p. 41), which implies the existence of causal relations between workaholism and job burnout (Schaufeli, Taris, & van Rhenen, 2008). This was also pointed out by Maslach (1986), who called workaholism the main cause of burnout syndrome. The current state of research does not confirm this thesis unambiguously. This is because a majority of findings so far concerning the relationship between burnout and workaholism were obtained in nonexperimental studies (Andreassen, Ursin, & Eriksen, 2007; Guglielmi, Simbula, Schaufeli, & Depolo, 2012; Schau-

feli, Bakker, van der Heijden, & Prins, 2009; Schaufeli et al., 2008; Taris, Schaufeli, & Verhoven, 2005; van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012; van Beek, Taris, & Schaufeli, 2011). However, the results of studies using structural equation modeling support the postulated direction of relationship between these two syndromes (Schaufeli, Bakker et al., 2009; Taris et al., 2005).

WORKAHOLISM

Numerous contemporary authors doing research workaholism (e.g., Dudek, 2008; Golińska, 2008; Hornowska & Paluchowski, 2007; Malinowska, 2014; Patel, Bowler, Bowler, & Methe, 2012; Szpitalak, 2012; Wojdyło, 2010, 2013) point out that consistency is lacking between studies and that debates on the definition lead to different indicators and assessment instruments being used. Consequently, diverse data are obtained concerning workaholics' psychophysical, occupational, and social functioning (cf. Malinowska, Jochymek, & Tokarz, 2011; Patel et al., 2012).

The meta-analysis performed by Patel and colleagues (2012) showed that the two most frequently used instruments for investigating workaholism – the Workaholism Battery (WorkBAT) and the Work Addiction Risk Test (WART) – “appear to focus on uniquely different aspects of workaholism and were subsequently found to be differentially related to various work criteria” (p. 2). For instance, workaholism measured by means of both the WART and the WorkBAT strongly correlates with mental health and occupational stress, whereas workaholism measured by means of the WorkBAT additionally shows strong relations with job characteristics, work engagement, professional success, and effort (Patel et al., 2012).

The inconsistent results concerning workaholics' functioning make it necessary to approach workaholism as a syndrome having a multidimensional structure (cf. Aziz & Zickar, 2006; Malinowska, 2014; Szpitalak, 2012). We therefore refer to the recent proposal advanced by Ng, Sorensen, and Feldman (2007), defining workaholics as “those whose emotions, thoughts, and behaviors are strongly dominated by their work” (p. 114). The multidimensional model includes three psychological processes that should be analyzed in any addiction (cf. Smith & Seymour, 2004): behavior, cognition, and affect. On this basis, it was decided that cognitive (drive to work) and emotional (work enjoyment, work engagement) factors should be adopted from the model proposed by Spence and

Robbins (1992) and that they should be supplemented with indicators reflecting the disturbed work–life balance.

The results of studies taking into account workers' estimations concerning the use of time provide data that argue in favor of including study variables that reflect work–life balance disturbances. Malinowska (2010) made an attempt to identify the criteria whose fulfillment may be a sign of workaholism or an increased risk of workaholism. Statistical analyses showed that what is important in defining workaholism is the time devoted to work and to thinking about work as well as the lack of balance between time devoted to professional life and time spent on other activities.

Summing up, the adopted multidimensional model of workaholism comprises the most significant elements referred to so far in defining this phenomenon, namely: drive to work (e.g., Dudek, 2008; Golińska, 2008; Hornowska & Paluchowski, 2007; Malinowska, 2014; Schaufeli et al., 2008; Spence & Robbins, 1992; Szpitalak, 2012; Wojdyło, 2013), work engagement (Malinowska, 2014; Spence & Robbins, 1992), work enjoyment (Malinowska, 2014; Spence & Robbins, 1992), and work–life imbalance (e.g., Andreassen, Griffiths, Hetland, & Pallesen, 2012; Aziz, Uhrich, Wuensch, & Swords, 2013; Dudek, 2008; Griffiths, 2005; Malinowska, 2014; Ng et al., 2007), including the time devoted to work and to thinking about work. The three-dimensional structure of workaholism (the cognitive, behavioral, and emotional dimensions) was confirmed in Malinowska's (2014) research, where the variables measuring workaholism proved to be good predictors of the complex theoretical construct.

Let us also note that the model of workaholism we adopted balances the pathogenetic and salutogenetic approaches (Antonovsky, 1979) to the disorder in question. The adoption of both perspectives enables the complementary inclusion of positive as well as negative aspects of workaholism without making either of them dominant (as is the case in approaches treating workaholism as an addiction or as positive work engagement, cf. Malinowska, 2014). This choice appears to be justified in view of the available empirical data (e.g., Bonebright, Clay, & Ankenmann, 2000; van Beek et al., 2011) and the still early stage of development of the knowledge about functional addictions (cf. Juczyński, 2008).

BURNOUT SYNDROME

The description of the job demands–resources model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), selected when designing the present study, should be preceded by a presentation of the current definitions of burnout (Maslach, 1993/2000).

Maslach and Jackson (1981) defined burnout as “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people-work’ of some kind” (p. 99), presupposing close emotional contact with the client. This meant that burnout should concern exclusively social occupations (Maslach & Schaufeli, 1993). However, it was demonstrated that contact with the client is a weaker correlate of burnout than other characteristics of job demands, such as work overload or time pressure (Schaufeli & Enzmann, 1998).

Expanding the concept of burnout to include a variety of professions led to a redefinition of that syndrome. The first criterion, emotional exhaustion, as the central element of burnout did not change. As Maslach (1993/2000) observes, exhaustion is a necessary but insufficient precondition of burnout. A burnt-out person working in a social occupation experiences also depersonalization, which results in the person distancing themselves from clients and developing reduced personal accomplishment. Following the inclusion of nonsocial occupations, the concept of (client) depersonalization was replaced with the concept of cynicism, understood as distancing oneself from work as such. The reduced personal accomplishment criterion was extended to a general sense of inefficacy. According to another model of job burnout, authored by Demerouti and colleagues (2001) and designed not to be limited to social occupations, the dimensions of burnout distinguished by Maslach and Jackson (1981) – emotional exhaustion and depersonalization – can be replaced with more general ones: exhaustion, understood as resulting from intensive emotional, cognitive, and physical effort, and disengagement, understood as distancing oneself from the work one does and having a negative attitude to it. These two dimensions were found to be the key ones (Green, Walkey, & Taylor, 1991). They correlate with each other more strongly than with the third factor proposed by Maslach and Jackson (1981) – reduced personal accomplishment (Lee & Ashforth, 1996). The reduced personal accomplishment dimension, not mentioned in the model proposed by Demerouti and colleagues (2001), does not differentiate burnt-out people from non-burnt-out ones, either (Schaufeli, Bakker, Hoogduin, Schaap, & Kladler, 2001).

THE STATE OF RESEARCH ON THE RELATIONSHIP BETWEEN WORKAHOLISM AND BURNOUT

A majority of studies on burnout and workaholism so far have focused on determining the correlational relationships between these two constructs. These relationships are positive, mainly between workaholism and exhaustion (Andreassen et al., 2007; Guglielmi et al., 2012; Schaufeli et al., 2008; Taris et al., 2005; van Beek et al., 2012). However, data concerning the component relationships between workaholism and job burnout are contradictory. Depending on the study, the strongest relationships are found between burnout and emotional (Andreassen et al., 2007), cognitive (Burke & Matthiesen, 2004; Schaufeli, Bakker et al., 2009; Schaufeli et al., 2008), or behavioral (Guglielmi et al., 2012; van Beek et al., 2012) indicators of workaholism (see Table 1).

Table 1
Studies on the Strength of the Relationship Between Workaholism and Burnout (Own Compilation)

Author, year	Participants	Measures	Results
<i>The strongest relationships between burnout and emotional indicators of workaholism</i>			
Andreassen et al. (2007)	235 Norwegian bank employees, 57% women Mean age: 44 years ($SD = 9.7$)	Workaholism: the Norwegian version (Burke, Richardsen, & Martinussen, 2002) Workaholism Battery Scale (WorkBAT; Spence & Robbins, 1992) Burnout: the Norwegian version (no information about the authors of the adaptation) Maslach Burnout Inventory – General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996)	Significant relationships found between: <ul style="list-style-type: none"> • WE and E ($r = -.38$) • WE and RPA ($r = -.34$) • WE and C ($r = -.32$) • DW and W ($r = -.22$)
<i>The strongest relationships between burnout and cognitive indicators of workaholism</i>			
Burke & Matthiesen (2004)	211 Norwegian journalists, 33% women Age: 21%: below 29 years, 45%: 30-39 years, 18%: 40-49 years, 15%: 50-59 years, 2%: above 60 years	Workaholism: the Norwegian version (Burke et al., 2002) WorkBAT (Spence & Robbins, 1992) Burnout: the Norwegian version (no information about the authors of the adaptation) MBI-GS (Schaufeli et al., 1996)	Nonenthusiastic Workaholics and Enthusiastic Workaholics score higher on E and C than Work Enthusiasts. Considering also Disenchanted Workers (scoring higher on the two burnout scales as well), we conclude that higher burnout scores are obtained by high-DW individuals.

Schaufeli et al. (2008)	587 middle-ranking and high-ranking managers of a Dutch telecommunications company, 22% women Age: 2%: below 24 years, 22%: 24-34 years, 35%: 35-44 years, 34%: 45-54 years, 7%: above 55 years	Workaholism: Items from the Drive to Work scale of the WorkBAT (Spence & Robbins, 1992) and the Compulsive Tendencies scale ^a (WART; Robinson, 1999) Burnout: the Dutch version (Schaufeli & van Dierendonck, 2000) MBI-GS (Schaufeli et al., 1996)	Significant relationships found between: <ul style="list-style-type: none"> • DW and E ($r = -.41$) • EW and E ($r = -.32$) • DW and C ($r = -.27$) • DW and RPA ($r = -.23$)
Schaufeli, Bakker et al. (2009)	2115 Dutch physicians immediately after graduation, 61% women Mean age: 32 years ($SD = 3.5$)	Workaholism: The Dutch Workaholism Scale (DUWAS, Schaufeli, Shimazu, & Taris, 2009) with two subscales: (a) Excessive Working and (b) Compulsive Working Burnout: the Dutch version (Schaufeli & van Dierendonck, 2000) Maslach Burnout Inventory – Human Services Survey (MBI-HSS; Maslach, Jackson, & Leiter, 1996)	Significant relationships found between: <ul style="list-style-type: none"> • CW and E ($r = -.50$) • EW and E ($r = -.42$) • CW and D ($r = -.34$) • EW and RPA ($r = -.28$) • CW and RPA ($r = -.24$) • EW and D ($r = -.17$)
<i>The strongest relationships between burnout and behavioral indicators of workaholism</i>			
Guglielmi et al. (2012)	166 Italian school principals, 67% women Age: 15%: below 50 years, 44%: 50-55 years, 29%: 56-60 years, 12%: above 60 years	Workaholism: the Italian version (Guglielmi et al., 2012) DUWAS (Schaufeli, Shimazu et al., 2009) Burnout: the Italian version (Borgogni, Galati, Petitta, & Centro Schweitzer, 2005) MBI-GS (Schaufeli et al., 1996).	Significant relationships found between: <ul style="list-style-type: none"> • EW and E ($r = -.45$) • CW and E ($r = -.25$) • EW and C ($r = -.20$) • CW and C ($r = -.17$)
van Beek et al. (2012)	760 employees of Chinese hospitals: 544 male nurses, 99% women; 216 physiotherapists, 61% women Mean age of male nurses: 29 years ($SD = 7.48$), physiotherapists – 35 years ($SD = 9.33$)	Workaholism: the Chinese version (van Beek et al., 2012) DUWAS (Schaufeli, Shimazu et al., 2009) Burnout: the Chinese version (van Beek et al., 2012) MBI-GS (Schaufeli et al., 1996)	Significant relationships found between: <ul style="list-style-type: none"> • EW and E ($r = -.43$) • CW and E ($r = -.26$) • EW and C ($r = -.26$) • CW and C ($r = -.11$)

Note. ^a Researchers (Schaufeli et al., 2008) emphasize that the name of the WART subscale that was used (Compulsive Tendencies scale) is confusing, since a majority of its items refer to hard work whereas the remaining items concern inability to relax and a sense of guilt caused by not working. Consequently, one of the variables they distinguish is *excessive working*, instead of *compulsive tendencies*.

EW – excessive working; DW – drive to work; CW – compulsive working; WE – work enjoyment; C – cynicism; D – depersonalization; RPA – reduced personal accomplishment; E – exhaustion.

It should be stressed, however, that research (cf. Table 1) has omitted either emotional (Guglielmi et al., 2012; Schaufeli, Bakker et al., 2009; Schaufeli et al., 2008; van Beek et al., 2012) or behavioral (Andreassen et al., 2007; Burke & Matthiesen, 2004) indicators of workaholism; as a result, there is little data showing the whole complexity of the phenomena discussed.

THE AIMS OF THE STUDY

The aim of the study was to: (1) confirm the expected positive relationships between workaholism and burnout syndrome; (2) explore the relationships between the indicators of workaholism, burnout, and seniority; (3) build and empirically verify the structural model in an attempt to structure the relationships between the studied variables.

METHOD

Participants

The participants were 210 individuals (82 women and 128 men). Most of them were young people, aged $M = 28.62$ years ($SD = 4.55$), with higher education (86.7%), not managing a team (76.7%), with less than five years of service (55.2%). The participants were all recruited from one place of work.

Materials

Workaholism was measured using the WorkBAT Scale (Spence & Robbins, 1992) as adapted into Polish by Malinowska, Tokarz, and Gad (2010) as well as the Time Use Inventory (Tokarz, Malinowska, & Jochymek, 2014).

Workaholism Battery (WorkBAT). This instrument consists of 15 statements, which participants respond to on a 5-point scale (1 – *strongly agree*; 5 – *strongly disagree*). Its items make up three dimensions: (a) Work Engagement ($\alpha = .50$), e.g., “I like to use my time constructively both on and off the job”; (b) Drive to Work ($\alpha = .74$), e.g., “I feel obliged to work hard even when it is not enjoyable”; (c) Work Enjoyment ($\alpha = .67$), e.g., “I like my work more than most people do.”

Due to the fact that – as in other studies (cf. Andreassen et al., 2007; Kanai, Wakabayashi, & Fling, 1996; McMillan, Brady, O’Driscoll, & Marsh, 2002)

– the Work Engagement scale did not reach satisfactory reliability (the lowest acceptable reliability being $\alpha = .65$; De Vellis, 2003), its items were excluded from analyses. Thanks to this operation, the reliability of the measure (comprising the items of the Work Enjoyment and Drive to Work scales) was $\alpha = .70$.

Time Use Inventory (TUI). This instrument distinguishes 10 domains of human life (cf. Klinger & Cox, 2004): sleep, household duties, social life, leisure, spiritual life, work, passion, family, professional development, and other. The participants' task is to specify how many hours a week they devote to activity in and thinking about each life domain. The instrument allows to compute: (a) Work–Life Imbalance – Doing (ID; $\alpha = .68$) – a behavioral indicator comprising six assessment criteria¹. Its intensity is defined by the number of criteria met by the participant. An example criterion of ID is “Devoting 50 or more hours a week to work”; (b) Work–Life Imbalance – Thinking (IT; $\alpha = .88$) – a cognitive indicator comprising six assessment criteria, such as “Thinking about work takes more than 50% of the time devoted to thinking about all life domains.” Additionally, the instrument allows to estimate the amount of time devoted to work and to thinking about work.

The Oldenburg Burnout Inventory. The level of burnout was measured using the *Oldenburg Burnout Inventory* (OLBI; Demerouti et al., 2001) as adapted into Polish by Masłowska (2008). This instrument consists of 16 items, eight per scale, the scales being: (a) Exhaustion ($\alpha = .74$), e.g., “During my work, I often feel emotionally drained”; (b) Disengagement from Work ($\alpha = .78$), e.g., “Sometimes I feel sickened by my work tasks.” The task of the participants is to indicate to what extent they agree with each statement on a 4-point scale, where 1 means *strongly agree*, and 4 means *strongly disagree*. Cronbach's α for this measure was .83.

The measurement of demographic and work-related variables. These variables were the following: gender, age, education, marital status, possession of children, managing a team of employees, mode of work (fixed working hours vs. shift work system), organization-specific seniority, position-specific seniority, and total seniority.

¹ The criteria are computed on the basis of participants' responses. The author (Malinowska, 2010) developed them using classification – decision tree algorithms, CRT (Breiman's C&RT implementation), available in the SPSS package. The external criterion of validity for the indicators was the scores on WorkBAT subscales. In accordance with Spence and Robbins's (1992) proposal, the distinction between workaholics and enthusiastic workaholics was used. The ID indicator was distinguished on the basis of high drive to work and high work enjoyment (these results matched the enthusiastic workaholic type). The IT indicator was distinguished on the basis of high drive to work and low work enjoyment (these results matched the workaholic type).

RESULTS

Preliminary analyses

Statistical analysis was performed in SPSS.

The distributions of WorkBAT and OLBI scores are normal (*Kolmogorov-Smirnov* $D < .05$), while TUI scores do not have normal distribution. Variables with right-skewed distribution were subjected to decimal logarithmization. This transformation allowed to fulfill the assumption of normal distribution of variables, important in performing regression. It is also justified to interpret the results as percentage increments in the time devoted to work or to thinking about work.

Developing contrasts for TUI indicators (recoding the ordinal variable into a continuous variable). A majority of the participants (80.1%) did not meet any of the criteria of work-life imbalance – thinking (IT), and as regards work-life imbalance – doing (ID) a majority of the participants (52.7%) met at least one of the six criteria. Due to the large difference between the number of people meeting at least one criterion and the number of those not meeting any, we decided to recode the indicators. In each of them we distinguished two categories: (a) individuals not meeting any of the criteria, (b) individuals meeting at least one criterion. Next, contrasts were built between these categories for the IT indicator (IT contrast – comparing individuals maintaining and not maintaining work-life imbalance – thinking) and for the ID indicator (ID contrast – comparing individuals maintaining and not maintaining work-life imbalance – doing).

Burnout. The results of one-factor analyses of variance showed that the level of burnout did not differ significantly between groups distinguished by gender ($F = 0.55$, $p = .46$), marital status ($F = 2.00$, $p = .14$), education ($F = 0.45$, $p = .64$), or possession of children ($F = 1.37$, $p = .24$). No differences were found, either, in the level of burnout between people working fixed hours and those working in a shift system ($F = 0.05$, $p = .83$). The only variable connected with work and at the same time related to the level of burnout was organization-specific seniority, ($F = 4.01$, $p = .008$), but not position-specific seniority ($F = 0.82$, $p = 0.48$) or total seniority ($F = 2.40$, $p = .052$). Because no particular direction of the relationship between burnout and seniority was assumed, post hoc analyses were performed (HSD Tukey test). Significantly higher burnout scores were obtained among those participants whose organization-specific seniority at the time of measurement was not longer than six months compared to

those with an organization-specific seniority of two to five years ($p = .004$) and those who had been working in the organization longer than five years ($p = .03$).

Based on the above results, we decided to recode the seniority variable into a variable with two categories: (1) individuals with less than half a year of service, (2) individuals with half a year of service or more. Next, contrasts were built – that is, comparisons between the two categories distinguished (contrast for seniority). The analysis of Pearson's r correlations showed that contrast for seniority correlated positively with burnout ($r = .20$) as well as with only one of its scales: Disengagement ($r = .25$). This means that, compared to individuals with longer seniority, those with less than half a year of service show lower engagement and, what follows, higher burnout.

The relationship between workaholism and burnout. Of all the indicators of workaholism, it was enjoyment that showed the strongest relationship with burnout ($r = -.52$). Enjoyment correlates negatively with both exhaustion ($r = -.38$) and disengagement ($r = -.53$). Of the cognitive indicators of workaholism, only compulsion shows a relationship with the Exhaustion scale ($r = .21$). As regards ID contrast², it is the only indicator of workaholism that shows negative relationships with both burnout scales: Exhaustion ($r = -.22$) and Disengagement ($r = -.26$).

Main analyses

In order to eliminate the possible sources of distortion in the assessment of the models described below, control was established over homoscedasticity (the constancy of the variance of residuals), the distribution of the model's residuals, and the collinearity of variables. Based on Cook's distance, outliers were detected. We decided to remove one of them – Cook's distance for that outlier was greater than for other cases in the model for the dependent variables of burnout and exhaustion, which increased the values of the model's coefficients. The values of the remaining statistics were acceptable ($VIF < 1.08$, $Tolerance > 0.9$).

Linear regression. We performed three linear regression analyses, with workaholism indicators and contrast for seniority as independent variables. The following variables turned out to be significant predictors of burnout (corrected R -squared = .31): work enjoyment ($\beta = -.49$, $t = -8.01$, $p < .001$), drive to work ($\beta = .13$, $t = 2.22$, $p = .03$), and ID contrast ($\beta = -.15$, $t = -2.41$, $p = .017$). Burnout can be explained by (corrected R -squared = .22): work enjoyment ($\beta = -.37$,

² ID contrast – the contrast between not meeting any criterion of work–life imbalance – doing and meeting at least one of such criteria (imbalance vs. balance – doing).

$t = -5.72, p < .001$), drive to work ($\beta = .23, t = 3.65, p < .001$), and ID contrast ($\beta = -.17, t = -2.55, p = .01$). As regards lack of commitment, the best predictors (corrected R -squared = .31) were: work enjoyment ($\beta = -.48, t = -7.86, p < .001$), contrast for seniority ($\beta = .15, t = 2.42, p = .017$), and the increase in time spent on thinking about work ($\beta = .12, t = 2.01, p < .045$).

The presented analyses reveal that enjoyment is a significant predictor of burnout and its two components. The higher the satisfaction scores, the lower the exhaustion and disengagement. It was also found that exhaustion is predicted by drive to work (positive relationship) and ID contrast. People who maintain work–life balance – doing score higher on exhaustion than those who meet at least one criterion of work–life imbalance – doing. The level of disengagement may be explained not only by enjoyment, but also by the increase in time devoted to thinking about work (positive relationship) and by contrast for seniority, which means that people with less than half a year of service show lower work engagement than those with longer seniority.

Structural equation modeling (path analysis). Based on the results of correlation and linear regression analyses, a structural model was constructed, with exhaustion and disengagement as explained variables (see Figure 1).

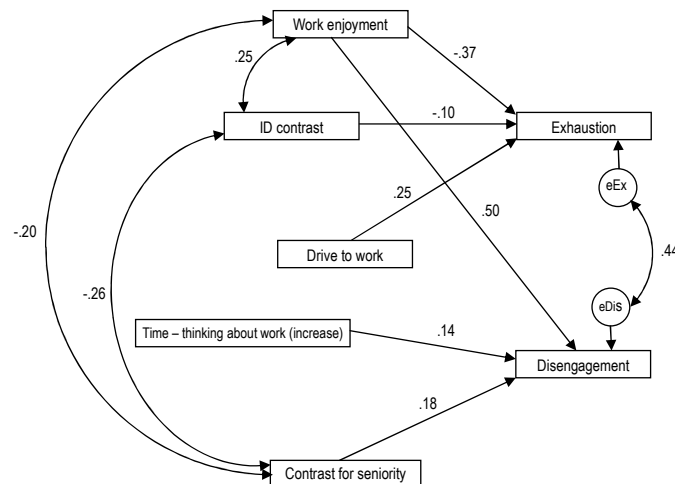


Figure 1. The structural model explaining variance in burnout indicators: *exhaustion* and *disengagement*. The values next to the paths represent the model's standardized regression weights.

Note. ID contrast – the contrast between not meeting any criterion of work–life imbalance – doing and meeting at least one of such criteria (imbalance vs. balance – doing).

Contrast for seniority – contrast between organization-specific seniority below six months and above six months.

The model is well fitted, as shown by the results of the chi-square test ($\chi^2 = 11.87$, $df = 11$, $p = .37$) and by model fit indices (TLI = .992; RMSEA = .019). The Hoelter value of 345 ($p < .05$) confirmed that the sample of 209 individuals is acceptable – a rejection of the adopted model would require a group half as large again.

The analysis of standard total effects showed that enjoyment had the strongest negative influence³ on exhaustion (-.37) and on disengagement (-.50). The level of exhaustion depends not only on enjoyment but also on drive to work (.25) and ID contrast (individuals not meeting any of the ID criteria show a higher level of exhaustion than those meeting at least one of such criteria; -.10). Disengagement is influenced not only by enjoyment, either, but also by the amount of time devoted to thinking about work (the greater the increase in time spent on thinking about work, the lower the engagement; .14) and by seniority (individuals with less than half a year of service are less engaged than those who have worked in a particular organization for half a year or longer; .18). The estimation of explained variance indicates that the factors explain 28% of variance in the disengagement variable and 23% in the exhaustion variable.

DISCUSSION

We explained of burnout using various indicators of workaholism. The results confirmed a positive correlation between workaholism and burnout, which had been found before in studies on Dutch (Schaufeli, Bakker et al., 2009; Schaufeli et al., 2008; Taris et al., 2005), Norwegian (Andreassen et al., 2007), Italian (Guglielmi et al., 2012), and Chinese employees (van Beek et al., 2012). In the present study, we took into account the cognitive (drive to work, time devoted to thinking about work), behavioral (work–life balance – doing, time devoted to work), and emotional (work enjoyment) components of workaholism, of which only enjoyment and work–life imbalance – doing showed significant relationships with both indicators of burnout. We therefore believe that the relationships between these phenomena should be considered at the level of their components (cf. McMillan & O’Driscoll, 2004) as well as dimensions. This, as will

³ In path analysis models the relationships between the variables included in the model are assumed to have a causal character (Cwalina, 2000). However, due to the fact that the presented research does not have an experimental character, “the positive verification of the model does not prove that the causal relationships assumed in the model actually occur but only that the model **may** be true” (Cwalina, 2000, p. 17).

be shown below, considerably increases the possibilities of comparing the results of studies in which various indicators of workaholism were taken into account.

Of all the components of workaholism, the strongest negative relationship with burnout was found for work enjoyment (-.52). This variable is the most significant in predicting both exhaustion and disengagement. Similar results, showing the strongest relationships between burnout and emotional indicators of workaholism, were obtained by Andreassen and colleagues (2007). In other studies, the relationships were found to be the strongest between burnout and the cognitive (Burke & Matthiesen, 2004; Schaufeli, Bakker et al., 2009; Schaufeli et al., 2008) or behavioral indicator of workaholism (Guglielmi et al., 2012; van Beek et al., 2012).

Four issues appear to be of importance. (1) Time devoted to work was not directly related to burnout. By contrast, time devoted to thinking about work or work-life imbalance – doing were significant predictors, respectively, of disengagement and exhaustion (both of these being components of occupational burnout). These findings are consistent with the data obtained by other researchers (e.g., Beckers et al., 2004; Burke, 1999; van den Broeck et al., 2011), indicating that the quality of time use is of greater importance to an individual's proper functioning than the amount of time. (2) Even though cognitive indicators of workaholism are related to both components of burnout, drive to work contributes only (or as much as) to an increase in exhaustion in a person (cf. also van den Broeck et al., 2011), end excessive thinking about work may translate into disengagement but not into exhaustion. (3) The level of disengagement can be explained not only by enjoyment and time devoted to thinking about work but also by seniority, since individuals with less than half a year of service show lower work engagement than those with longer seniority. A negative relationship between burnout and seniority was also obtained by Hamama (2012). Nevertheless, our results show that the relationship found between seniority and disengagement cannot be generalized to apply to burnout as such. This is because, according to the job demands-resources model (Demerouti et al., 2001), a burnt-out person is an employee who is disengaged and at the same time exhausted. (4) Data show that the people who maintain work-life balance – doing score higher on exhaustion than those with distorted work-life balance, which can be explained by Baumeister's (2002) theory of ego depletion resulting from excessive control. However, this interpretation goes beyond the scope of issues considered here and does not seem to be sufficient.

The methods used have certain limitations. Firstly, the study was conducted exclusively among the employees of one organization, which employs mainly

young people ($M = 28.61$, $SD = 4.42$), and more than half of the participants (55%) had less than five years of service behind them. Still, these statistics do not decrease the chance of finding individuals scoring high on burnout or workaholism. Maslach (1982) pointed out that burnout syndrome may develop during the first five years of work. What is more, the means obtained for drive to work and work enjoyment in the examined sample did not differ significantly from the respective means for these variables in the group of Master of Business Administration students and graduates (cf. Malinowska, 2010). Thus, the participants' young age and their having been recruited from nondiverse sources do not decrease the chance of the sample including individuals with a high level of burnout or workaholism.

Secondly, all the measures applied were self-rating measures. Numerous studies show, however, that workaholics have an adequate self-concept compared to how they are rated by their acquaintances (Aziz & Zickar, 2006; McMillan, O'Driscoll, & Brady, 2004) or workmates (Burke & Ng, 2007).

Thirdly, the study conducted does not allow us to draw conclusions concerning causal relationships. The presented structural model should be treated as an extension of regression analysis, making it possible to find joint matches for two related regression equations explaining variance in exhaustion and disengagement by workaholism indicators and seniority (cf. Garson, 2012). This is a proposal of showing the relationships between the components of burnout and the indicators representing three dimensions of workaholism. It supports the direction of the relationship between these two syndromes as postulated by Maslach (1986, cf. also van den Broeck et al., 2011) and justifies the necessity of considering the relationship between workaholism and burnout at the level of components representing various dimensions of the studied phenomena. If the proposed model is to be adopted, it is necessary to repeat the study on a different sample and conduct longitudinal research.

REFERENCES

- Andreassen, C. S., Griffiths, M. D., Hetland, J., & Pallesen, S. (2012). Development of a work addiction scale. *Scandinavian Journal of Psychology*, 53, 265-272.
- Andreassen, C. S., Ursin, H., & Eriksen, H. R. (2007). The relationship between strong motivation to work, 'workaholism' and health. *Psychology and Health*, 22(5), 615-629.
- Antonovsky, A. (1979). *Health, stress and coping: New perspectives on mental and physical well-being*. San Francisco: Jossey Bass.

- Aziz, S., Uhrich, B., Wuensch, K. L., & Swords, B. (2013). The Workaholism Analysis Questionnaire: Emphasizing work-life imbalance and addiction in the measurement of workaholism. *Journal of Behavioral and Applied Management*, 14, 71-86.
- Aziz, S., & Zickar, M. J. (2006). A cluster analysis investigation of workaholism as a syndrome. *Journal of Occupational Health Psychology*, 11(1), 52-62.
- Baumeister, R. F. (2002). Ego depletion and self-control failure. An energy model of the self's executive function. *Self and Identity*, 1, 129-136.
- Beckers, D. G. J., van der Linden, D., Smulders, P. G. W., Kompier, M. A. J., van Veldhoven, M. J. P. M., & van Yperen, N. W. (2004). Working overtime hours: Relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine*, 46, 1282-1289.
- Bonebright, C. A., Clay D. L., & Ankenmann, R. D. (2000). The relationships of workaholism with work-life conflict, life satisfaction, and purpose in life. *Journal of Counseling Psychology*, 47(4), 469-477.
- Borgogni, L., Galati, D., Petitta, L., & Centro Formazione A. Schweitzer. (2005). *Questionario di Check-up Organizzativo, Manuale*. Firenze, Italy: Organizzazioni Speciali.
- Burke, R. J. (1999). Workaholism in organizations: Gender differences. *Sex Roles*, 41(5/6), 333-345.
- Burke, R. J., & Matthiesen, S. B. (2004). Workaholism among Norwegian journalists: Antecedents and consequences. *Stress and Health*, 20, 301-308.
- Burke, R. J., & Ng, E. S. (2007). Workaholic behaviors: Do colleagues agree? *International Journal of Stress Management*, 14(3), 312-320.
- Burke, R. J., Richardsen, A. M., & Martinussen, M. (2002). Psychometric properties of Spence and Robbins' measures of workaholism components. *Psychological Reports*, 91, 1098-1104.
- Cwalina, W. (2000). Zastosowanie modelowania równań strukturalnych w naukach społecznych. In *Statystyka w badaniach naukowych oraz polska wersja Statistica Neural Network. Materiały na seminaria organizowane przez StatSoft Polska Sp. z o.o. 9 października 2000 r. w Warszawie* (pp. 15-23). Cracow: StatSoft Polska.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- De Vellis, R. F. (2003). *Scale development: Theory and applications*. Thousand Oaks, CA: Sage.
- Dudek, B. (2008). Pracoholizm – szkodliwy skutek nadmiernego zaangażowania w pracę. *Medycyna Pracy*, 59(3), 247-254.
- Garson, G. D. (2012). *Path analysis*. Asheboro, NC: Statistical Associates Publishers.
- Golińska, L. (2008). *Pracoholizm – uzależnienie czy pasja*. Warsaw: Diffin.
- Green, D. E., Walkey, F. H., & Taylor, A. J. W. (1991). The three-factor structure of the Maslach Burnout Inventory. *Journal of Social Behavior and Personality*, 6, 453-472.
- Griffiths, M. D. (2005). Workaholism is still a useful construct. *Addiction Research and Theory*, 13(2), 97-100.
- Guglielmi, D., Simbula, S., Schaufeli W. B., & Depolo, M. (2012). Self-efficacy and workaholism as initiators of the job demands-resources model. *Career Development International*, 17(4), 375-389.
- Hamama, L. (2012). Burnout in social workers treating children as related to demographic characteristics, work environment, and social support. *Social Work Research*, 36(2), 113-125.
- Hornowska, E., & Paluchowski, W. J. (2007). *Praca skrywana obsesja. Wyniki badań nad zjawiskiem pracoholizmu*. Poznań: Bogucki Wydawnictwo Naukowe.

- Juczyński, Z. (2008). Dylematy i kontrowersje wokół uzależnień. In J. M. Brzeziński & L. Cierpiałkowska (Eds.), *Zdrowie i choroba. Problemy teorii, diagnozy i praktyki*. Gdańsk: Gańskie Wydawnictwo Psychologiczne.
- Kanai, A., Wakabayashi, M., & Fling, S. (1996). Workaholism among employees in Japanese corporation: An examination based on the Japanese-version Workaholism Scale. *Japanese Psychological Research*, 38(4), 192-203.
- Klinger, E., & Cox, W. M. (2004). Motivation and the theory of current concerns. In W. M. Cox & E. Klinger (Eds.), *Handbook of motivational counselling: Concepts, approaches, and assessment* (pp. 3-27). Chichester, UK: Wiley.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123-133.
- Malinowska, D. (2010). *Wybrane motywacyjne i osobowościowe uwarunkowania różnych postaci pracoholizmu* (Unpublished doctoral dissertation written under the supervision of Aleksandra Tokarz, Ph.D. hab.). Jagiellonian University, Cracow.
- Malinowska, D. (2014). *Pracoholizm: Zjawisko wielowymiarowe*. Cracow: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Malinowska, D., Jochymek, S., & Tokarz, A. (2011). *Zdrowy pracoholizm? Rozważania o złożonej naturze pracoholizmu i jego związkach ze zdrowiem i jakością życia w różnych obszarach funkcjonowania człowieka*. Paper presented at the 34th Scientific Convention of Polish Psychological Association, Katowice, Poland.
- Malinowska, D., Tokarz, A., & Gad, N. (2010). Wstępne badania nad adaptacją skali Workaholism Battery (WorkBAT) Spence i Robbins. *Studia Psychologiczne*, 48(3), 35-42.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, C. (1986). Stress, burnout and workaholism. In R. R. Killberg, P. E. Nathan, & R. W. Thoreson (Eds.), *Professionals in distress: Issues, syndromes and solutions in psychology* (pp. 53-73). Washington, DC: American Psychological Association.
- Maslach, C. (1993/2000). Wypalenie – w perspektywie wielowymiarowej. In H. Sęk (Ed.), *Wypalenie zawodowe: Przyczyny, mechanizmy, zapobieganie* (pp. 13-31). Warsaw: Wydawnictwo Naukowe PWN.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99-113.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 1-16). Washington: Taylor & Francis.
- Masłowska, E. (2008). *System wartości i kody etyczne jako determinanty wypalenia zawodowego nauczycieli i finansistów* (Unpublished master's thesis). Jagiellonian University, Cracow.
- McMillan, L. H. W., Brady, E. C., O'Driscoll, M. P., & Marsh, N. V. (2002). A multifaceted validation study of Spence and Robbins' (1992) workaholism battery. *Journal of Occupational and Organizational Psychology*, 75, 357-368.
- McMillan, L. H. W., & O'Driscoll, M. P. (2004). Workaholism and health: Implications for organizations. *Journal of Organizational Change Management*, 17, 509-519.
- McMillan, L. H. W., O'Driscoll, M. P., & Brady, E. C. (2004). The impact of workaholism on personal relationships. *British Journal of Guidance and Counseling*, 32, 171-186.

- Ng, T. W. H., Sorensen, K. L., & Feldman, D. C. (2007). Dimensions, antecedents, and consequences of workaholism: A conceptual integration and extension. *The Construct of Workaholism*, 136, 111-136.
- Patel, A. S., Bowler, M. C., Bowler, J. L., & Methe, S. A. (2012). A meta-analysis of workaholism. *International Journal of Business and Management*, 7(11), 2-17.
- Pines, A. M. (1993). Burnout: An existential perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 33-52). Washington, DC: Taylor & Francis.
- Robinson, B. E. (1999). The Work Addiction Risk Test: Development of a tentative measure of workaholism. *Perceptual and Motor Skills*, 88, 199-210.
- Schaufeli, W. B., Bakker, A. B., Hoogduin, K., Schaap, C., & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology and Health*, 16, 565-582.
- Schaufeli, W. B., Bakker, A. B., van der Heijden, F. M. M. A., & Prins, J. T. (2009). Workaholism, burnout and well-being among junior doctors: The mediating role of role conflict. *Work & Stress*, 23(2), 155-172.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion for research and practice: A critical analysis of theory, assessment, research, and interventions*. London: Taylor & Francis.
- Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). Maslach Burnout Inventory – General Survey. In C. Maslach, S. E. Jackson, & M. P. Leiter (Eds.), *The Maslach Burnout Inventory – Test manual* (pp. 22-26). Palo Alto, CA: Consulting Psychologists Press.
- Schaufeli, W. B., Shimazu, A., & Taris, T. W. (2009). Being driven to work exceptionally hard: The evaluation of a two-factor measure of workaholism in the Netherlands and Japan. *Cross-Cultural Research*, 43, 320-348.
- Schaufeli, W. B., Taris, T. W., & van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*, 57(2), 173-203.
- Schaufeli, W. B., & van Dierendonck, D. (2000). *Handleiding van de Utrechtse Burnout Schaal (UBOS)*. Lisse, The Netherlands: Swets Test Services.
- Smith, D. E., & Seymour, R. B. (2004). The nature of addiction. In R. H. Coombs (Ed.), *Handbook of addictive disorders: A practical guide to diagnosis and treatment* (pp. 3-30). New Jersey: John Wiley & Sons, Inc.
- Spence, J. T., & Robbins, A. S. (1992). Workaholism: Definition, measurement, and preliminary results. *Journal of Personality Assessment*, 58(1), 160-178.
- Szpitalak, M. (2012). *Wielowymiarowy Kwestionariusz Oceny Pracoholizmu*. Cracow: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Taris, T. W., Schaufeli, W. B., & Verhoeven, L. C. (2005). Workaholism in Netherlands: Measurement and implications for job strain and work-nonwork conflict. *Applied Psychology: An International Review*, 54, 37-60.
- Tokarz, A., Malinowska, D., & Jochymek, S. (2014). *Inwentarz Wykorzystania Czasu (IWCz) jako narzędzie wspomagające pomiar psychologicznych właściwości pracy: Opracowanie narzędzia, jego rzetelność i trafność* (manuscript in preparation).
- van Beek, I., Hu Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. J. (2012). For fun, love, or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology*, 61(1), 30-55.

- van Beek, I., Taris, T. W., & Schaufeli, W. B. (2011). Workaholic and work engaged employees: Dead ringers or worlds apart? *Journal of Occupational Health Psychology*, 16(4), 468-482.
- van den Broeck, A., Schreurs, B., De Witte, H., Vansteenkiste, M., Germeyns, F., & Schaufeli, W. B. (2011). Understanding workaholics' motivations: A self-determination perspective. *Applied Psychology: An International Review*, 60(4), 600-621.
- Wojdyło, K. (2010). *Pracoholizm: perspektywa poznawcza*. Warsaw: Difin.
- Wojdyło, K. (2013). Work craving – teoria uzależnienia od pracy. *Nauka*, 3, 87-97.